

ments of an annual yield per acre of 20 tons of spineless cactus which can be utilized for cattle food. In tropical climates, where the land can be irrigated lightly once or twice, an annual yield of 150-180 tons per acre may be expected. As contrasted with 100 acres alfalfa under the best conditions, the yield of Burbank cactus under equally favorable conditions would be 30 to 40 times, we are told on pp. 390-391. And the best of it all, according to our author, is "that once established, the new cactus may remain for years uncultivated and undisturbed, constantly growing on and adding to its vast store."

To the flower lover, the account of Burbank's work with poppies will surely be of absorbing interest. On page 79, a Burbank poppy is described with flowers, a dozen of which placed one upon another, would effectually conceal a man—seven of these magnificent blossoms placed end to end in a row are as high as a tall man.

The volume is well and quite copiously illustrated and no one interested in flowers, fruits, and plant life in general can help being fascinated and very much impressed with this account of the wonders an untrained and comparatively uneducated man has produced in the plant world through using his intuition.

ORLAND E. WHITE.

PROCEEDINGS OF THE CLUB

OCTOBER 30, 1918

The meeting was held in the Morphological Laboratory of the New York Botanical Garden, at 3:30 P.M. There were thirty persons present. Vice-president Barnhart occupied the chair.

The minutes of October 8 were read and approved.

The nomination and election of M. Nishimura, Columbia University, N. Y. City, and Dr. Thos. Owen, Dept. Archives and History, Montgomery, Alabama, followed.

A communication from Prof. J. E. Kirkwood relating to the publication of a paper as one of the *Memoirs* of the Club was read and referred to the Board of Editors for a report.

The scientific program for this meeting consisted of an "Ex-

hibition of a Collection of Flowering Plants and Mosses from North Star Bay" made by Dr. E. O. Hovey on the Macmillan Expedition. Dr. Hovey then gave an illustrated lecture on "Description of the Habitats of the Plants Forming this Collection."

"The collection of plants made by Dr. Hovey at North Star Bay, 78 degrees 30 minutes N. latitude, was exhibited by Mrs. N. L. Britton. It included a few flowering plants, *Arnica alpina*, *Cassiope tetragona*, *Dryas integrifolia*, *Papaver radicum*, *Ranunculus nivalis* and *Saxifraga oppositifolia*, as well as three dwarf willows, *Salix herbacea*, *S. groenlandica*, named by Dr. Rydberg, and a larger species of willow still undetermined. Of the flowerless plants, 25 are mosses, 8 are hepatics, five are lichens, and two are fungi, one a *Mycosphaerella*, parasitic on the leaves of one of the willows and the other a mould (*Mucor* sp. ?), which seems to be abundant at North Star Bay. The collections were studied by Dr. Evans, Dr. Andrews, Dr. Seaver, Miss Coker, Mr. Williams and Mrs. Britton. After examining the specimens the Club adjourned to the lecture-room, where Dr. Hovey showed some beautiful views of North Star Bay and its flora, including some excellent photographs of birds and a few of the Esquimaux and their dogs."

Adjournment followed.

B. O. DODGE,
Secretary.

NOVEMBER 12, 1918

The first meeting in the month was held at the American Museum of Natural History. There were twenty-one persons present. Prof. R. A. Harper was elected chairman and called the meeting to order at 8:20 P.M. The usual order of business was dispensed with.

Dr. Geo. E. Nichols delivered the lecture of the evening, the subject being, "The *Sphagnum* Moss and its Use in Surgical Dressings." The speaker first described and illustrated several of the more common species of *Sphagnum* to be found in North America, calling attention to the differences in size, color and general habit existing between species. The marked variation in individuals of the same species was also noted as being due to

climatic or environmental influences. The morphological characters of the stems and leaves were described and the particular features by virtue of which the dried moss is able to absorb such large quantities of water were pointed out. It was shown that dried *Sphagnum* is capable of absorbing as much or more per dry weight as the ordinary absorbent cotton used in making dressings.

The cells of the leaves are of two sorts. The smaller or narrower cells making a network, are green, while lying between the green cells we find much larger, empty cells whose walls are provided with large pores through which water may be absorbed from the outside. These cells are also characterized by thickened bands which serve to strengthen the system.

Numerous specimens of *Sphagnum* were exhibited. The methods by which the moss is harvested, dried, sorted and made into surgical dressings were described.

A number of the various kinds of dressings made with *Sphagnum* or with cotton were shown. The lecture was illustrated with lantern slides. It has been published in part in the *Journal of the New York Botanical Garden*.

Adjournment followed.

B. O. DODGE,
Secretary.

NEWS ITEMS

At the annual meeting of the Club held on January 14 the following officers were elected: *President*, H. M. Richards; *Vice Presidents*, J. H. Barnhart and C. Stuart Gager; *Secretary and Treasurer*, B. O. Dodge; *Editor*, A. W. Evans; *Associate Editors*, Jean Broadhurst, J. Arthur Harris, M. A. Howe, M. Levine, G. E. Nichols, A. B. Stout, and Norman Taylor. Dr. M. A. Howe was elected as the delegate of the club to the Council of the New York Academy of Sciences.

Professors Edward W. Berry and J. T. Singewald, Jr., of the Johns Hopkins University are planning to leave in April for a six months trip of geological and paleontological exploration in the Andes. The region that they will cover extends from Peru to southern Chile.